A5200-4.7

Automobile Insurance Losses
Collision Coverages

THE FREQUENCY OF CLAIMS INVOLVING SALVAGE SUBCOMPACT AND COMPACT CARS 1980 MODELS

Research Report HLDI A-16
January 1982

Highway Loss Data Institute
Watergate Six Hundred
Washington, D. C. 20037

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Summary

This Highway Loss Data Institute report presents information on the frequency with which the more popular 1980 model year subcompacts and compacts generated collision coverage claim amounts greater than the replacement value of the car less its salvage value, with the result that the car was sold for salvage. This study was prompted by the fact that many cars with newer designs, in particular with front wheel drive and transverse mounted engine, often require the use of expensive equipment and techniques to repair their crash damage, compared with cars with traditional designs. This has raised concerns that these newer designs may more often be declared total losses because they are unrepairable.

Principal Findings

- No evidence was found that the frequency with which the collision coverage claims involved salvage was greater for cars with front wheel drive and transverse mounted engines. The car with the lowest frequency and percentage of claims involving salvage, was the Oldsmobile Cutlass four-door – a compact model with rear wheel drive and separate frame. The car with the highest frequency and percentage of claims involving salvage was the Ford Pinto two-door – a small subcompact with rear wheel drive and a unitized body.

- The results for the compacts suggest that cars with separate frames may have a lower frequency of collision claims involving salvage than cars with unitized bodies. Three of the four compact models with separate frames had the lowest frequency and percentage of claims with salvage among all of the cars studied.

- There were no obvious relationships between the average amounts paid for the salvaged cars and their basic design features. The car with the lowest salvage recovery value was the Ford Pinto two-door – a small subcompact with rear wheel drive and unitized body. The car with the highest salvage recovery value was the Volkswagen Rabbit – a small subcompact with front wheel drive and unitized body.

- There was considerable variation among the cars in both the frequency of claims involving salvage and the average salvage recovery amounts.

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Introduction

The Highway Loss Data Institute (HLDI) is a non-profit, public service organization that gathers, processes, and publishes insurance data concerned with human and economic losses associated with motor vehicle use and especially with the way such losses vary among different kinds of vehicles.

In recent years passenger car designs have changed substantially. In particular, traditional designs utilizing separate frames are increasingly being replaced by cars with unitized body construction and rear wheel drive is being supplanted by front wheel drive with transverse mounted engines. These newer designs require different, and usually more complex, repair procedures, particularly for cars with front wheel drive when the damage involves the front suspension. The repair procedures for these newer designs frequently require the use of expensive equipment and techniques that are not always available at smaller repair facilities. This has raised concerns that these newer designs, because of the greater complexity involved in repairing them, may more often be declared unrepairable or total losses than cars with more traditional designs.

This report presents information on the frequency with which the more popular 1980 model year subcompacts and compacts were involved in collision coverage claims in which the estimated repair costs less the salvage value were greater than the replacement value of the car, with the result that the car was sold for salvage.

The results were based on the experience of 1980 model subcompacts and compacts during their first year of availability as reported in HLDI report R80-2. Detailed explanations of data sources, methods of analysis, definitions, and vehicle series designations are given in HLDI report R80-1. The particular cars included in this report were chosen because each one had at least 10,000 insured vehicle years of exposure and most of the cars with the newer designs are in these size groups.

It is intended that the dissemination of this and other HLDI reports will lead to research into ways of reducing vehicle-related damage to people and property, and also provide the public with information relating to the differences in the crash damage produced by different kinds of vehicles.

Results and Discussion

Table 1 shows the frequency of collision claims in which the cars were sold for salvage for twenty-two 1980 model compacts and subcompacts.* These 22 vehicle series represent the 1980 models in these size classes with the most exposure. The basic design characteristics of each car – front or rear wheel drive and separate frame or unitized body – also are indicate in Table 1.

The frequency of collision coverage claims involving salvage ranged from a low of 1.3 claims per 1,000 insured vehicle years for the Oldsmobile Cutlass four-door – a compact with rear wheel drive and separate frame – to a high of 7.9 for the Ford Pinto two-door – a small subcompact with rear wheel drive and unitized body.

Only four cars had separate frames, and they are all General Motors compacts. The two compacts with unitized bodies – both specialty models – had the highest frequency of claims involving salvage in this size group, but these results were lower than those for many of the smaller cars with unitized bodies.

Among the eight small subcompacts, four of the cars had rear wheel drive and four had front wheel drive. There was no discernible relationship between the frequency of claims involving salvage and whether or not the car had front or rear wheel drive. There is no evidence from the results for these cars to suggest that cars with front wheel drive have more frequent claims involving salvage than cars in the same size group with rear wheel drive.

The subcompacts all had the same basic design – rear wheel drive and unitized body. The small compacts studied were all General Motors X-body cars with the same basic design – front wheel drive and unitized body. The results from these two size groups provide no support for the contention that front wheel drive cars are more often involved in claims involving salvage.

Table 1 also shows the percentage of all collision coverage claims in which the cars were sold for salvage for each of the cars. Basically the same patterns hold, and there is no evidence that cars with front wheel drive are more frequently total losses than cars with traditional rear wheel drive.

The results for the compacts suggest that cars with separate frames may have a lower frequency of collision claims involving salvage than cars with unitized bodies. Three of the four compact models with separate frames had the lowest frequency and percentage of claims with salvage among all of the cars studied.

Table 2 shows the average amounts paid for the salvaged cars. As with the frequency of salvage, there is no discernible pattern associated with amounts recovered for salvage and the basic design features of the car. The car with the lowest salvage recovery value was the Ford Pinto two-door – a small subcompact with rear wheel drive and unitized body. The car with the highest salvage recovery value was the Volkswagen Rabbit – a small subcompact with front wheel drive and unitized body.

*It should be noted that the results presented in this report are for 1980 models in their first year of availability and therefore, because they were relatively new cars, the frequency of salvage is much lower than for older cars.

Table 2 also shows the 90th percentile amounts from the collision coverage loss payment distributions; these are the dollar amounts below which 90 percent of the claims lie. Higher values of this percentile for a particular car indicate more of its claims are for greater dollar amounts and would be indicative that more of its losses are for large dollar amounts. Again, there is no obvious pattern between the 90th percentile amounts and the basic design features of the cars in question. The car with the lowest 90th percentile value was the Oldsmobile Cutlass four-door – a compact with rear wheel drive and a separate frame – and the car with the highest was the Ford Mustang – a subcompact with rear wheel drive and a unitized body.

Tables 1 and 2 show that there was considerable variation among the cars in both the frequency of claims involving salvage and the average salvage recovery amounts.

Table 1
The Frequency and Percentage of Claims Involving Salvage
Collision Coverages – 1980 Models

Make & Series	Front (F) or Rear (R) Wheel Drive	Frame (F) or Unitized (U) Body	Exposure (Insured Vehicle Years)	Frequency of Claims Involving Salvage (Per 1,000 Insured Vehicle Years)*	Percent of Claims Involving Salvage*
Small Subcompact					
Volkswagen Rabbit**	F	U	27,155	2.3	3.1
Honda Accord - 2 dr.	F	U	10,003	3.0	3.8
Datsun 210**	R	U	12,962	3.9	4.1
Toyota Corolla**	R	U	15,923	4.8	4.3
Chevrolet Chevette - 2 dr.	R	U	18,879	4.9	5.9
Honda Civic - 2 dr.	F	U	13,206	5.2	5.7
Datsun 310 - 2 dr.	F	U	12,908	6.3	5.6
Ford Pinto - 2 dr.	R	U	10,158	7.9	7.9
Subcompact					
Chevrolet Chevette - 4 dr.	R	U	24,750	4.0	5.4
Pontiac Sunbird - 2 dr.	R	U	11,859	4.3	4.8
Chevrolet Monza - 2 dr.	R	U	15,421	4.7	4.5
Ford Mustang - 2 dr.	R	U	22,248	4.8	4.9
Toyota Celica - 2 dr.	R	U	25,908	6.5	4.9
Small Compact					
Buick Skylark - 4 dr.	F	U	11,440	2.3	3.1
Chevrolet Citation - 4 dr.	F	U	24,311	2.5	3.5
Chevrolet Citation - 2 dr.	F	U	19,290	3.5	4.5
Compact					
Oldsmobile Cutlass - 4 dr.	R	F	12,053	1.3	1.9
Chevrolet Monte Carlo	R	F	11,314	1.9	2.2
Oldsmobile Cutlass - 2 dr.	R	F	27,268	2.0	2.3
Buick Regal - 2 dr.	R	F	19,841	2.4	2.6
Ford Thunderbird	R	U	11,634	3.2	3.5
Chevrolet Camaro	R	U	10,318	4.4	3.3

*Results are standardized to the following exposure distribution:

Youthful Operator - 15% No Youthful Operator - 85%

**Body Style cannot be determined from Vehicle Identification Number.

Minimum exposure for reporting: 10,000 insured vehicle years.

Table 2
Salvage Recovery Amounts and 90th Percentiles from Loss Payment Distributions
Collision Coverages — 1980 Models

Make and Series	Front (F) or Rear (R) Wheel Drive	Frame (F) or Unitized (U) Body	Average Salvage Recovery Amount*	90th Percentile From Loss Payment Distribution
Small Subcompact				
Volkswagen Rabbit**	F	U	$1,602	$2,792
Honda Accord - 2 dr.	F	U	1,282	2,963
Datsun 210**	R	U	1,115	2,818
Toyota Corolla**	R	U	1,158	3,030
Chevrolet Chevette - 2 dr.	R	U	906	3,400
Honda Civic - 2 dr.	F	U	1,251	2,629
Datsun 310 - 2 dr.	F	U	1,150	3,096
Ford Pinto - 2 dr.	R	U	736	3,681
Subcompact				
Chevrolet Chevette - 4 dr.	R	U	1,069	2,884
Pontiac Sunbird - 2 dr.	R	U	1,112	2,825
Chevrolet Monza - 2 dr.	R	U	1,056	3,060
Ford Mustang - 2 dr.	R	U	1,190	3,695
Toyota Celica - 2 dr.	R	U	1,202	3,495
Small Compact				
Buick Skylark - 4 dr.	F	U	1,462	2,374
Chevrolet Citation - 4 dr.	F	U	1,195	2,566
Chevrolet Citation - 2 dr.	F	U	1,199	2,882
Compact				
Oldsmobile Cutlass - 4 dr.	R	F	1,424	2,352
Chevrolet Monte Carlo	R	F	1,298	2,498
Oldsmobile Cutlass - 2 dr.	R	F	1,381	2,701
Buick Regal - 2 dr.	R	F	1,324	2,541
Ford Thunderbird	R	U	1,308	3,202
Chevrolet Camaro	R	U	1,380	3,281

*Results are standardized to the following exposure distribution:

Youthful Operator - 15% No Youthful Operator - 85%

**Body Style cannot be determined from Vehicle Identification Number.

Minimum exposure for reporting: 10,000 insured vehicle years.

List of Publications

Research reports published by the Highway Loss Data Institute are:

R72-1 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1972 Models*, June 1973.

R73-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1973 Models Compared with 1972 Models*, September 1973.

R73-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1973 Models*, March 1974.

R73-3 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1973 Models During Their First Two Years*, December 1974.

R73-4 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1973 Models During Their First Three Years*, December 1975.

R74-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1974 Models*, May 1974.

R74-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1974 Models During Their First Year*, December 1974.

R74-3 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1974 Models During Their First Two Years*, December 1975.

R75-1 *Automobile Insurance Losses, Collision Coverages, Initial Results for 1975 Models*, July 1975.

R75-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1975 Models During Their First Year*, December 1975.

R76-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1976 Models*, June 1976.

R76-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1976 Models During Their First Year, 1975 Models During Their First Two Years, 1974 Models During Their First Three Years*, December 1976.

R77-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1977 Models*, June 1977.

R77-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1977 Models During Their First Year, 1976 Models During Their First Two Years, 1975 Models During Their First Three Years*, December 1977.

R78-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1978 Models*, June 1978.

R78-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1978 Models During Their First Year, 1977 Models During Their First Two Years, 1976 Models During Their First Three Years*, January 1979.

R79-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1979 Models*, June 1979.

R79-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1979 Models During Their First Year, 1978 Models During Their First Two Years, 1977 Models During Their First Three Years*, December 1979.

R80-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1980 Models*, June 1980.

R80-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1980 Models During Their First Year, 1979 Models During Their First Two Years, 1978 Models During Their First Three Years*, December 1980

R81-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1981 Models*, July 1981.

R81-2 *Insurance Losses, Collision Coverages; Passenger Cars, Vans, Pickups, and Utility Vehicles; 1981 Models During Their First Year, 1980 Models During Their First Two Years, 1979 Models During Their First Three Years*, December 1981.

V78-1 *Automobile Insurance Losses, Non-Commercial Collision Coverages; Variations by Make and Series, Vans, Pickups and Utility Vehicles; 1978 Models During Their First Year, 1977 Models During Their First Two Years*, February 1979.

V79-1 *Automobile Insurance Losses, Non-Commercial Collision Coverages; Variations by Make and Series, Vans, Pickups and Utility Vehicles; 1979 Models During Their First Year, 1978 Models During Their First Two Years*, April 1980.

V79-2 *Automobile Insurance Losses, Personal Injury Protection Coverages; Claim Frequency Results by Size of Claim for 1977, 1978, and 1979 Vans, Pickup Trucks, and Utility Vehicles*, October 1980.

V79-3 *Insurance Theft Losses; Vans, Pickups, and Utility Vehicles, 1979 Models*, May 1981.

V80-1 *Automobile Insurance Losses, Non-Commercial Collision Coverages; Variations by Make and Series, Vans, Pickups, and Utility Vehicles; 1980 Models During Their First Year, 1979 Models During Their First Two Years, 1978 Models During Their First Three Years*, December 1980.

V80-2 *Automobile Insurance Losses, Personal Injury Protection Coverages; Injury Claim Frequency Results by Size of Claim; Vans, Pickup Trucks, and Utility Vehicles, 1977-1980 Models*, September 1981.

I75-1 *Automobile Insurance Losses, Injury Coverages; Claim Frequency Results for 1974 and 1975 Models*, June 1976.

I75-2 *Automobile Insurance Losses, Percentage of Collision Claims with Associated Injury Claims for 1974 and 1975 Models*, March 1977.

I76-1 *Automobile Insurance Losses, Injury Coverages; Claim Frequency Results for 1974, 1975, and 1976 Models*, November 1977.

I76-2 *Automobile Insurance Losses, Injury Coverages; Claim Frequency Results for 1974, 1975, and 1976 Models*, September 1978.

I77-1 *Automobile Insurance Losses, Injury Coverages; Claim Frequency Results for 1977 Models*, September 1978.

I78-1 *Automobile Insurance Losses, Personal Injury Protection Coverages; Claim Frequency Results for 1977 and 1978 Models*, September 1979.

I79-1 *Automobile Insurance Losses, Personal Injury Protection Coverages; Claim Frequency Results by Size of Claim for 1977, 1978, and 1979 Models*, October 1980.

I80-1 *Automobile Insurance Losses, Personal Injury Protection Coverages; Claim Frequency Results by Size of Claim; 1978-1980 Models*, September 1981.

A-1 *Automobile Insurance Losses, Collision Coverages; A Comparison of Results for 1972 and 1973 Models*, May 1974.

A-2 *Automobile Insurance Losses, Collision Coverages; Relationships Between Losses and Vehicle Density, 1972 and 1973 Models*, September 1974.

A-3 *Automobile Insurance Losses, Collision Coverages; A Comparison of Results for 1973, 1974 and 1975 Models*, July 1975.

A-4 *Automobile Insurance Losses, Collision Coverages; Relationships Between Losses and Vehicle Density, 1974 and 1975 Models*, December 1975.

A-5 *Automobile Insurance Losses, Collision Coverages; Relationships Between Losses and Vehicle Body Style, 1974 and 1975 Models*, December 1975.

A-6 *Automobile Insurance Losses, Collision Coverages; An Investigation of Relationships Between Losses and Engine Specifications, Using 1973 Models*, June 1976.

A-7 *Automobile Insurance Losses, Collision Coverages; Annual Increases and Seasonal Variations, 1972, 1973, 1974 and 1975 Models*, June 1976.

A-8 *Automobile Insurance Losses, Injury Coverages; A Preliminary Comparison of Results for Volkswagen Rabbits with Passive and Active Seat Belts, 1975 and 1976 Models*, June 1977.

A-9 *Automobile Insurance Losses, Collision Coverages: A Comparison of Collision Claim Size Distributions for 1974, 1975, and 1976 Models*, November 1977.

A-10 *Automobile Insurance Losses, Injury Coverages; Comparisons of Claim Frequencies of Volkswagen Rabbits with Automatic and Manual Seat Belts, 1975, 1976, and 1977 Models*, June 1979.

A-11 *Automobile Insurance Losses, Collision Coverages; The Consistency of the Loss Experience of Specific Vehicles Produced in Several Years, 1975 to 1978 Models*, June 1979.

A-12 *Automobile Insurance Losses, Collision Coverages; An Assessment of the Effects of the Federal Safety Bumper Standard on the Losses for 1972 Through 1978 Models*, June 1980.

A-13 *Automobile Insurance Losses, Personal Injury Protection and Collision Coverages; The Effects of Car Size on Crash Losses, 1977-1980 Models*, May 1981.

A-14 *Automobile Insurance Losses, Personal Injury Protection and Collision Coverages; Comparisons of the Loss Experience of Two- and Four-Door Cars, 1978, 1979, and 1980 Models*, June 1981.

A-15 *Automobile Insurance Losses, Personal Injury Protection and Collision Coverages; Relationships Between Injury and Collision Losses and Engine Options for Selected 1977-1979 Compact Cars*, June 1981.

A-16 *Automobile Insurance Losses, Collision Coverages; The Frequency of Claims Involving Salvage; Subcompact and Compact Cars; 1980 Models*, January 1982.

T79-1 *Automobile Insurance Theft Losses by Make and Series; 1979 Models*, June 1980.

T80-1 *Automobile Insurance Theft Losses by Make and Series; 1979 and 1980 Models*, April 1981.

S5200-4.8

INSURANCE LOSSES, COMPREHENSIVE COVERAGES
NON-CRASH FIRE LOSSES
1979-1980 MODELS

Research Report HLDI A-17
February 1982

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Summary

This Highway Loss Data Institute report describes variations in both the frequency and size of insurance claims for non-crash related fire losses involving 1979 and 1980 model year private passenger cars.

Principal Findings

- There were large variations in the non-crash fire loss experience of different cars. The car with the worst experience had fire losses that were more than fifty times greater than the results for the car with the best experience.
- Among the individual vehicle series whose loss results are summarized, the 1979 MGB had the worst non-crash fire loss experience and the 1979 four-door Pontiac Bonneville had the best.
- In each vehicle size class, sports or specialty models had the worst experience.
- In most cases, two-door models had a higher frequency of fire losses and higher average loss payment results than corresponding four-door models.
- There were large differences in the fire loss experience even among similar vehicles. For example, among 1980 two-door small subcompacts, the relative average loss payments per insured vehicle year ranged from a low of 24 for the Honda Accord to 102 for the Volkswagen Rabbit.
- There were large differences among individual vehicle series in the distribution of the size of fire claims. For example, only eight percent of the fire claims for the 1979 four-door Pontiac Bonneville exceeded $2,000. In contrast, 38 percent of the claims for the Chevrolet Corvette were in excess of $6,000.

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Introduction

The Highway Loss Data Institute (HLDI) is a non-profit, public service organization that gathers, processes, analyzes, and publishes information on the injury and other loss experience of private passenger motor vehicles, and, in particular, how these losses vary among different kinds of vehicles.

Previous HLDI reports have described the collision, personal injury, and theft loss experience of passenger cars, vans, pickup trucks, and utility vehicles. This report describes the non-crash fire loss experience of private passenger automobiles insured under comprehensive coverages. The results are based on the loss experience of 1979 and 1980 model year private passenger cars from their introduction through March 1981. The data used in this report were supplied by eight insurers: Aetna, Allstate, GEICO, Kemper, Liberty Mutual, Nationwide, State Farm, and USAA.

The results presented in this report encompass the complete spectrum of non-crash fire losses occurring under comprehensive coverages.

Although fire losses are small in relation to losses from other automobile insurance coverages, automobile fires are potentially hazardous, and these are the first results available on this subject on an individual make and series basis.

It is intended that the dissemination of this and other HLDI reports will contribute to research into ways for reducing vehicle-related damage to people and property, as well as providing the public with information illustrating the differences in the insurance loss experience of different kinds of vehicles.

Results and Discussion

This report summarizes the non-crash fire loss experience of 1979 and 1980 model year private passenger cars insured under comprehensive coverages. The loss results presented in this study are based on more than 4.5 million insured vehicle years of exposure for 1979 models and over 2 million years for 1980 models.

Comparisons of Results for Car Size Groups and Body Style Subgroups

Figure 1 illustrates the average loss payments per insured vehicle year for non-crash fire losses involving 1980 models. Results are shown by car size and body style subgroups - sports and specialty models, regular two-door models, regular four-door models, and station wagons . The results displayed in Figure 1 are presented in relative terms with the value 100 representing the average loss payment per insured vehicle for *all* 1980 models of $1.7.

Figure 1 shows that sports and specialty models had the highest average loss payments per insured vehicle year in all size classes. Subcompact sports models had the highest non-crash fire loss results. Losses for these models were more than five times the average for all 1980 models combined. The figure also shows that regular two-door models had higher average loss payments per insured vehicle year than regular four-door models in each size class.

Figure 2 displays the average loss payments per insured vehicle year by vehicle size group and body style subgroup for 1979 models. Again, sports and specialty (particularly sports) models had the worst non-crash fire loss results. The result for small subcompact sports models was more than three times higher than the result for *all* 1979 models combined and the result for subcompact sports models was more than five times the average for *all* 1979 models. In each size group, regular two-door models had higher loss results than regular four-door models.

Comparisons of Results for Individual Series

Tables 1 and 2 show the 1979 model year cars with the best and worst non-crash fire loss experience.* The cars are ranked by their relative average loss payments per insured vehicle year with the value 100 representing the average for all 1979 model year cars.

Table 1 (page 7) lists all cars with results at least sixty percent better than average (i.e., a relative result of 40 or less). Eleven series are included in Table 1. The vehicle with the best non-crash fire loss experience was the four-door Pontiac Bonneville, an intermediate model.

Table 2 (page 8) lists all cars with results at least two times worse than average (i.e., a relative result of 200 or more). Eleven series are listed in Table 2. All but one, the two-door Mercury Marquis, are either sports or specialty models. The car with the worst loss experience was the MGB, a small subcompact model, which incurred losses more than twelve times the overall average and almost sixty times the result for the car with the best non-crash fire loss results. (It should be noted that although the MGB had sufficient fire claims for reporting, it had less than 7,000 insured vehicle years of exposure.)

Table 3 (page 9) presents the detailed non-crash fire loss results for 1980 model year cars with more than 20,000 insured years of exposure or at least twenty fire claims. In general, the greater the exposure associated with each result, the more confidence can be placed in it. The values displayed are total exposure, measured in insured vehicle years, and relative values for three loss categories - claim frequency per 10,000 insured vehicle years, average loss payment per claim, and average loss payment per insured vehicle year. The value 100 corresponds to the overall result for *all* 1980 models combined in each loss category. In addition to results for individual vehicle series, results are also presented for car size groups and body style subgroups. Within each body style subgroup, individual vehicle series are listed in ascending order (i.e., from best to worst) of their relative average loss payments per insured vehicle year.

*No comparable best/worst list is presented for 1980 models since only 28 individual vehicle series out of a total of 174 series contained in the HLDI data base for the 1980 model year had accumulated sufficient exposure to meet the reporting thresholds.

There were large variations in the loss experience of the 1980 model year cars whose results are summarized in Table 3. It should be noted that only 28 vehicle series, out of a total of 174 contained in the HLDI data base for that model year, had accumulated sufficient exposure to meet the reporting thresholds. None of these cars was an intermediate or full-size model.

The Pontiac Firebird had the highest average loss payment per insured vehicle year among the 28 vehicle series. Its result (372) was more than fifteen times the result for the car with the best loss experience, the two-door Honda Accord(24). Other cars with high average loss payments per insured vehicle year were the Chevrolet Camaro (217) and Ford Thunderbird (167). All of the cars with the highest non-crash fire loss results were compact specialty models.

The 1980 cars with the highest frequency of fire claims were the Pontiac Firebird (199), Chevrolet Camaro (194), and Ford Thunderbird (182). The series with the lowest claim frequencies were the Toyota Corolla (53), Datsun 210 (55), and four-door Chevrolet Chevette (55).

The cars with the highest relative average loss payments per claim were the Pontiac Firebird (187) and Toyota Celica (158). The series with the lowest average loss payments per claim were the two-door Honda Accord (24), two-door Datsun 310 (38), and four-door Honda Accord (41).

Table 4 (page 14) presents detailed non-crash fire loss results for 1979 model year cars. Results are presented only for those individual vehicle series that had accumulated over 20,000 insured years of exposure or at least twenty fire claims. Again, there were large variations in loss experience even among cars of the same size group and body style subgroup. For example, among regular two-door small subcompact models, the relative average loss payments per insured vehicle year ranged from a low of 28 for the Datsun 210 to a high of 133 for the American Spirit. Similarly, among compact specialty models, fire losses ranged from a low of 73 for the Pontiac Grand Prix to a high of 220 for the Pontiac Firebird.

The 1979 models with the highest non-crash fire claim frequency results were the MGB (883), Lincoln Mark V (247), and Chevrolet Corvette (236). The series with the lowest claim frequencies were the Datsun 210 (37), Toyota Corolla (37), and Oldsmobile Cutlass station wagon (38).

The Chevrolet Corvette (274), Cadillac Eldorado (233), and Datsun 280 ZX (231) had the highest average loss payment per claim results. The cars with the lowest average loss payments per claim were the four-door Pontiac Bonneville (26), two-door Oldsmobile Delta 88 (38), and four-door Dodge Omni (44).

Fire Claim Size Distributions

This report, in addition to summarizing the non-crash fire loss experience of 1979 and 1980 model year cars, also presents the fire claim size distributions for 1979 model year vehicles. Table 5 shows the distributions of fire claims by car size group and body style subgroup for that year. Results are presented only for those size classes and body style groups that had at least thirty fire claims.*

Table 5 (page 20) shows the percentages of fire claims that exceeded $500, $1,000, $2,000, $4,000, and $6,000 for 1979 models. Larger cars, especially full-size models, had the highest percentage of claims in excess of $6,000. It should be noted that all full-size models are specialty cars. Small subcompacts, subcompacts, and small compacts, however, had the largest percentage of claims over $500, $1,000, and $2,000.

Table 5 also shows that in most cases sports and specialty models had larger claims more frequently than other models within the same size class. Four door models tended to have the smallest percentages of claims exceeding each claim size amount.

*The claim distributions presented in Tables 5-7 have not been adjusted for inflation nor have they been adjusted to reflect the depreciated value of a vehicle as it ages.

Tables 6 and 7 (page 21) illustrate fire claim size distributions for the 1979 model year vehicles with the best and worst non-crash fire loss experience. Results are presented only for those models with at least 30 fire claims. The Pontiac Bonneville four-door model, the vehicle with the best fire loss results, had only five percent of its claims in excess of $6,000. In contrast, 38 percent of the claims for the Chevrolet Corvette, one of the cars with the worst fire loss experience, exceeded $6,000.

Figure 1
Comprehensive Coverages-
Non-crash Fire Losses
Relative Average Loss Payments Per Insured Vehicle Year
1980 Models

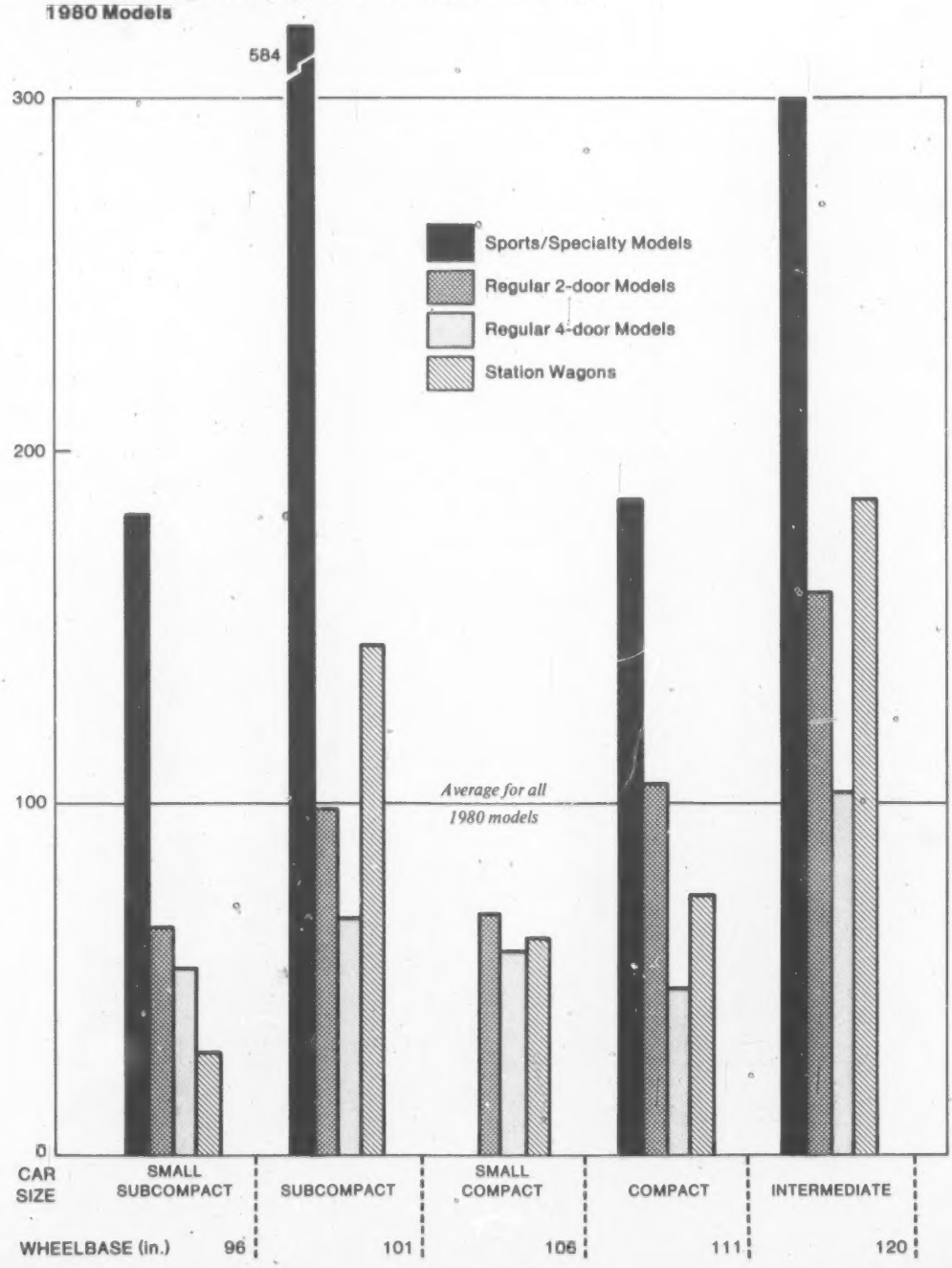

Figure 2
Comprehensive Coverages-
Non-crash Losses
Relative Average Loss Payments Per Insured Vehicle Year
1979 Models

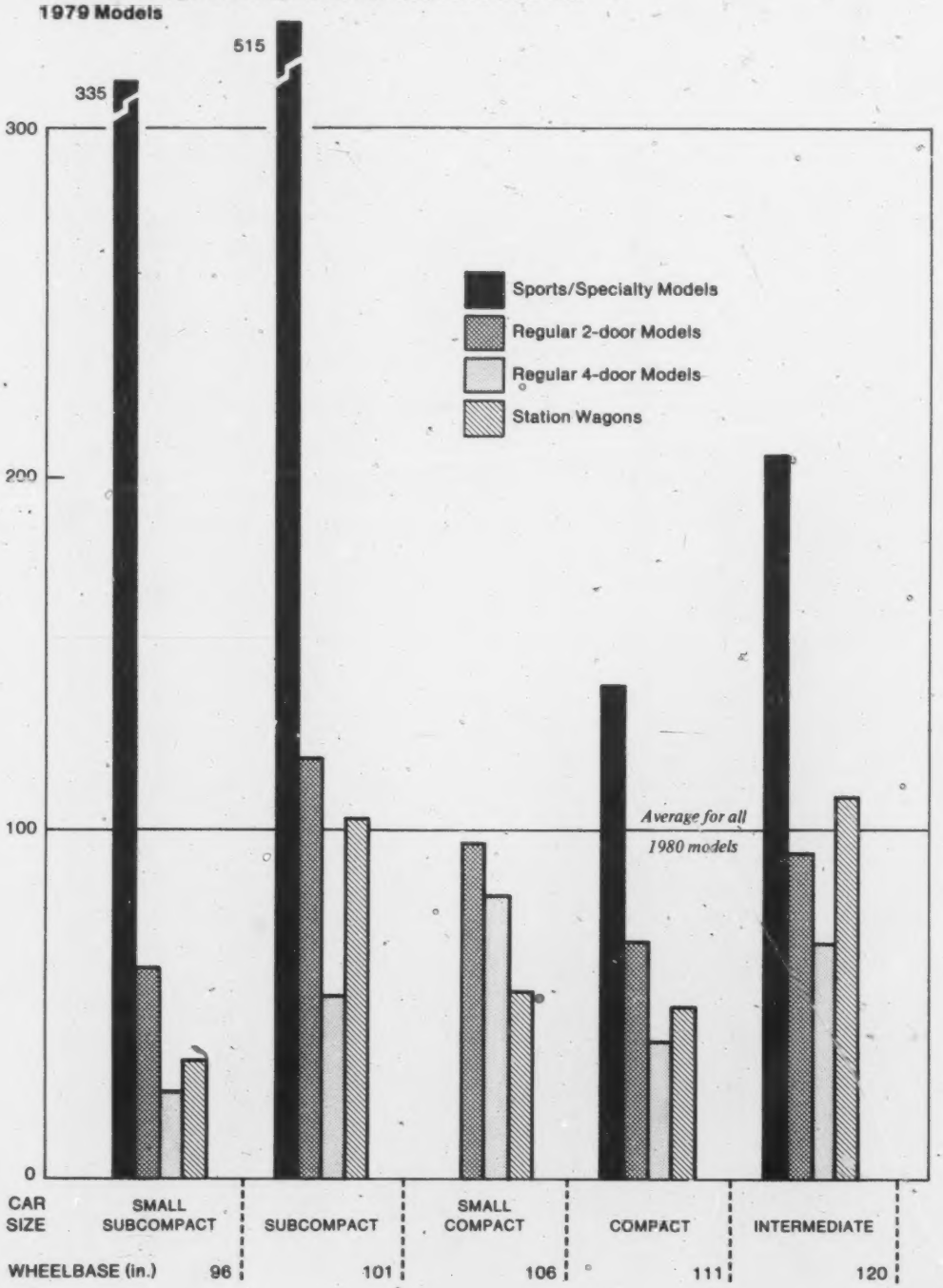

TABLE 1

RELATIVE AVERAGE LOSS PAYMENTS PER INSURED VEHICLE YEAR
1979 MODEL YEAR CARS WITH THE LOWEST NON-CRASH FIRE LOSSES

Make and Series	Body Style	Car Size	Relative Average Loss Payment Per Insured Vehicle Year
Pontiac Bonneville	4-door	Intermediate	21
Datsun 210	**	Small Subcompact	28
Toyota Corolla	**	Small Subcompact	31
Honda Accord	4-door	Small Subcompact	31
Chevrolet Malibu	4-door	Compact	31
Honda Civic	2-door	Small Subcompact	33
Honda Accord	2-door	Small Subcompact	34
Plymouth Volare	4-door	Intermediate	34
Oldsmobile Delta 88	2-door	Intermediate	38
Oldsmobile Cutlass	Sta.Wgn.	Compact	38
Chevrolet Malibu	2-door	Compact	39

**Body style cannot be determined from Vehicle Identification Number.

Notes:

1. 100 represents the average for all 1979 model year cars. All cars with results at least sixty percent better than average are listed.

Car Size Definition:

Small Subcompact - Cars with wheelbases less than or equal to 96 inches
Subcompact - Cars with wheelbases greater than 96 inches and less than or equal to 101 inches
Small Compact - Cars with wheelbases greater than 101 inches and less than or equal to 106 inches
Compact - Cars with wheelbases greater than 106 inches and less than or equal to 111 inches
Intermediate - Cars with wheelbases greater than 111 inches and less than or equal to 120 inches
Full-size - Cars with wheelbases greater than 120 inches

TABLE 2

RELATIVE AVERAGE LOSS PAYMENTS PER INSURED VEHICLE YEAR
1979 MODEL YEAR CARS WITH THE HIGHEST NON-CRASH FIRE LOSSES

Make and Series	Body Style	Car Size	Relative Average Loss Payment Per Insured Vehicle Year
MG MGB	Sports	Small Subcompact	1,201
Chevrolet Corvette	Sports	Subcompact	647
Lincoln Mark V	Specialty	Full-Size	427
Lincoln Continental 4 Dr.	Specialty	Full-Size	398
Cadillac Seville	Specialty	Intermediate	365
Cadillac Eldorado	Specialty	Intermediate	294
Mercury Marquis	2-door	Intermediate	276
Datsun 280 ZX	Sports	Small subcompact	259
Pontiac Firebird	Specialty	Compact	220
Buick Riviera	Specialty	Intermediate	219
Ford Thunderbird	Specialty	Intermediate	209

Notes:

1. 100 represents the average for all 1979 model year cars. All cars with results at least two times worse than average are listed.

Car Size Definition:

Small Subcompact - Cars with wheelbases less than or equal to 96 inches
Subcompact - Cars with wheelbases greater than 96 inches and less than or equal to 101 inches
Small Compact - Cars with wheelbases greater than 101 inches and less than or equal to 106 inches
Compact - Cars with wheelbases greater than 106 inches and less than or equal to 111 inches
Intermediate - Cars with wheelbases greater than 111 inches and less than or equal to 120 inches
Full-size - Cars with wheelbases greater than 120 inches

TABLE 3

LOSS PAYMENT SUMMARY BY MAKE AND SERIES
1980 MODELS - NON-CRASH FIRE RESULTS

PART A: ALL CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
ALL	ALL	2007963	100 = 7.8*	100 = $2126	100 = $1.7

*CLAIMS PER 10,000 INSURED VEHICLE YEARS

PART B: SMALL SUBCOMPACT CARS (WHEELBASE ≤ 96 INCHES)

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
ALL	SMALL SUBCOMPACT	560453	86	76	65
REGULAR TWO-DOOR MODELS		468367	85	74	63
HONDA ACCORD		28125	100	24	24
DATSUN 210**		36844	55	51	28
TOYOTA COROLLA**		50711	53	87	46
DATSUN 310		32389	135	38	51
HONDA CIVIC		34081	97	56	54
CHEVROLET CHEVETTE		49142	63	87	55
DATSUN 200 SX		21577	142	70	99
VOLKSWAGEN RABBIT**		70816	100	102	102
REGULAR FOUR-DOOR MODELS		21054	128	41	52
HONDA ACCORD		21054	128	41	52
STATION WAGONS		44332	55	55	30
SPORTS		26700	124	146	181

**PRECISE BODY STYLES CANNOT BE DETERMINED FROM THESE VEHICLE IDENTIFICATION NUMBERS.

(See page 13 for notes.)

TABLE 3

LOSS PAYMENT SUMMARY BY MAKE AND SERIES
1980 MODELS - NON-CRASH FIRE RESULTS

PART C: SUBCOMPACT CARS (96 INCHES < WHEELBASE ≤ 101 INCHES)

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
ALL	**SUBCOMPACT**	**425507**	**92**	**113**	**104**
REGULAR TWO-DOOR MODELS		**291932**	**96**	**102**	**98**
TOYOTA TERCEL		24543	63	60	38
CHEVROLET MONZA		46616	86	61	52
PONTIAC SUNBIRD		38909	109	94	102
FORD MUSTANG		61836	100	129	129
TOYOTA CELICA		40854	88	158	139
REGULAR FOUR-DOOR MODELS		**115372**	**71**	**93**	**66**
CHEVROLET CHEVETTE		65866	55	76	42
PLYMOUTH HORIZON		23153	67	83	56
STATION WAGONS		**5846**	**87**	**165**	**144**
SPORTS		**12356**	**208**	**281**	**584**

(See page 13 for notes.)

TABLE 3

LOSS PAYMENT SUMMARY BY MAKE AND SERIES
1980 MODELS - NON-CRASH FIRE RESULTS

PART D: SMALL COMPACT CARS (101 INCHES < WHEELBASE ≤ 106 INCHES)

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
ALL	**SMALL COMPACTS**	**281092**	**74**	**85**	**63**
REGULAR TWO-DOOR MODELS		**113401**	**76**	**89**	**68**
CHEVROLET CITATION		45456	71	101	72
REGULAR FOUR-DOOR MODELS		**149027**	**73**	**80**	**58**
CHEVROLET CITATION		59887	67	61	41
BUICK SKYLARK		27963	78	84	66
STATION WAGONS		**18664**	**62**	**99**	**61**

(See page 13 for notes.)

TABLE 3

LOSS PAYMENT SUMMARY BY MAKE AND SERIES
1980 MODELS - NON-CRASH FIRE RESULTS

PART E: COMPACT CARS (106 INCHES < WHEELBASE ≤ 111 INCHES)

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
ALL	**COMPACT**	**467902**	**119**	**97**	**115**
REGULAR TWO-DOOR MODELS		**176131**	**115**	**91**	**105**
OLDSMOBILE CUTLASS		72862	100	100	100
BUICK REGAL		54166	137	75	103
REGULAR FOUR-DOOR MODELS		**103380**	**91**	**52**	**47**
OLDSMOBILE CUTLASS		35471	90	50	45
BUICK CENTURY		25597	115	46	53
STATION WAGONS		**35814**	**58**	**127**	**74**
SPECIALTY		**152576**	**158**	**118**	**186**
PONTIAC GRAND PRIX		27740	87	97	84
CHEVROLET MONTE CARLO		33141	117	100	117
FORD THUNDERBIRD		31587	182	92	167
CHEVROLET CAMARO		28454	194	112	217
PONTIAC FIREBIRD		20014	199	187	372

(See page 13 for notes.)

TABLE 3

LOSS PAYMENT SUMMARY BY MAKE AND SERIES
1980 MODELS - NON-CRASH FIRE RESULTS

PART F: INTERMEDIATE CARS (111 INCHES < WHEELBASE ≤ 120 INCHES)

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
ALL	INTERMEDIATE	245512	136	124	169
REGULAR TWO-DOOR MODELS		44559	181	88	159
REGULAR FOUR-DOOR MODELS		116294	112	91	102
STATION WAGONS		23791	113	164	185
SPECIALTY		60867	160	187	299

PART G: FULL-SIZE CARS (WHEELBASE > 120 INCHES)

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
ALL	FULL-SIZE	27228	113	204	231
SPECIALTY		27228	113	204	231

NOTES:

SERIES ARE RANKED WITHIN GROUP AND SUBGROUP BY ASCENDING AVERAGE LOSS PAYMENTS PER INSURED VEHICLE YEAR. SERIES WITH LESS THAN 20,000 INSURED VEHICLE YEARS OF EXPOSURE AND FEWER THAN 20 CLAIMS ARE NOT SUMMARIZED.

TABLE 4

LOSS PAYMENT SUMMARY BY MAKE AND SERIES
1979 MODELS - NON-CRASH FIRE RESULTS

PART A: ALL CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
ALL	ALL	4515619	100 = 10.2*	100 = $1884	100 = $1.9

*CLAIMS PER 10,000 INSURED VEHICLE YEARS.

PART B: SMALL SUBCOMPACT CARS (WHEELBASE ≤ 96 INCHES)

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
ALL	**SMALL SUBCOMPACT**	**888817**	**76**	**104**	**79**
REGULAR TWO-DOOR MODELS		**692350**	**09**	**87**	**60**
DATSUN 210**		62709	37	76	28
TOYOTA COROLLA**		81858	37	83	31
HONDA CIVIC		60467	40	82	33
HONDA ACCORD		55955	56	60	34
CHEVROLET CHEVETTE		73796	57	72	41
VOLKSWAGEN RABBIT**		116798	101	88	89
FORD PINTO		65733	92	108	99
AMERICAN SPIRIT		20461	129	103	133
REGULAR FOUR-DOOR MODELS		**33603**	**59**	**44**	**26**
HONDA ACCORD		23381	59	52	31
STATION WAGONS		**92691**	**48**	**110**	**35**
FORD PINTO		24180	69	137	95
SPORTS		**70172**	**197**	**170**	**335**
MAZDA RX-7		27735	64	150	96
DATSUN 280 ZX		20175	112	231	259
MG MGB		6995	883	136	1201

**PRECISE BODY STYLES CANNOT BE DETERMINED FROM THESE VEHICLE IDENTIFICATION NUMBERS.

(See page 19 for notes.)

TABLE 4

LOSS PAYMENT SUMMARY BY MAKE AND SERIES
1979 MODELS - NON-CRASH FIRE RESULTS

PART C: SUBCOMPACT CARS (96 INCHES < WHEELBASE ≤ 101 INCHES)

MAKE SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
ALL SUBCOMPACT	**772328**	**109**	**108**	**118**
REGULAR TWO-DOOR MODELS	**494676**	**109**	**110**	**120**
TOYOTA CELICA	53888	57	123	70
PONTIAC SUNBIRD	47332	110	86	95
CHEVROLET MONZA	73377	106	97	103
DODGE OMNI	22565	157	73	115
PLYMOUTH HORIZON	27235	162	74	120
MERCURY CAPRI	45807	81	152	123
FORD MUSTANG	162407	121	128	155
REGULAR FOUR-DOOR MODELS	**205605**	**97**	**54**	**52**
CHEVROLET CHEVETTE	97960	64	69	44
DODGE OMNI	37146	142	44	62
PLYMOUTH HORIZON	47195	139	52	72
STATION WAGONS	**38973**	**96**	**107**	**103**
SPORTS	**33074**	**199**	**259**	**515**
CHEVROLET CORVETTE	24863	236	274	647

(See page 19 for notes.)

TABLE 4

LOSS PAYMENT SUMMARY BY MAKE AND SERIES
1979 MODELS - NON-CRASH FIRE RESULTS

PART D: SMALL COMPACT CARS (101 INCHES < WHEELBASE ≤ 106 INCHES)

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
ALL	**SMALL COMPACTS**	**229100**	**89**	**90**	**80**
REGULAR TWO DOOR MODELS		**102902**	**106**	**90**	**95**
MERCURY ZEPHYR		22345	101	72	73
FORD FAIRMONT		69984	118	96	113
REGULAR FOUR-DOOR MODELS		**72937**	**86**	**93**	**80**
FORD FAIRMONT		41736	75	109	82
STATION WAGONS		**53261**	**61**	**85**	**52**
FORD FAIRMONT		42491	65	88	57

(See page 19 for notes.)

TABLE 4

LOSS PAYMENT SUMMARY BY MAKE AND SERIES
1979 MODELS - NON-CRASH FIRE RESULTS

PART E: COMPACT CARS (106 INCHES < WHEELBASE ≤ 111 INCHES)

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
ALL	**COMPACT**	**1303366**	**89**	**95**	**85**
REGULAR TWO-DOOR MODELS		**568937**	**84**	**80**	**67**
CHEVROLET MALIBU		55829	84	46	39
FORD GRANADA		31485	69	94	65
OLDSMOBILE CUTLASS		232787	77	83	64
BUICK REGAL		133527	92	87	80
PLYMOUTH VOLARE		19648	100	82	82
CHEVROLET NOVA		22388	70	134	94
REGULAR FOUR-DOOR MODELS		**188226**	**62**	**61**	**38**
CHEVROLET MALIBU		52295	60	52	31
FORD GRANADA		35192	80	64	51
STATION WAGONS		**117826**	**52**	**95**	**49**
OLDSMOBILE CUTLASS		25749	38	101	38
CHEVROLET MALIBU		49278	50	102	51
SPECIALTY		**428378**	**120**	**117**	**140**
PONTIAC GRAND PRIX		98439	100	73	73
CHEVROLET MONTE CARLO		128612	110	90	99
CHEVROLET CAMARO		111144	121	129	156
PONTIAC FIREBIRD		82321	151	146	220

(See page 19 for notes.)

TABLE 4

LOSS PAYMENT SUMMARY BY MAKE AND SERIES
1979 MODELS - NON-CRASH FIRE RESULTS

PART F: INTERMEDIATE CARS (111 INCHES ≤ WHEELBASE ≤ 120 INCHES)

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
ALL	**INTERMEDIATE**	**1163886**	**120**	**92**	**110**
REGULAR TWO-DOOR MODELS		**227141**	**126**	**73**	**92**
OLDSMOBILE	DELTA 88	36855	101	38	38
BUICK	LESABRE	22102	88	46	41
FORD	LTD	35404	141	74	104
CHEVROLET	CAPRICE	23672	128	106	136
PONTIAC	BONNEVILLE	23971	172	83	143
MERCURY	MARQUIS	10928	188	147	276
REGULAR FOUR-DOOR MODELS		**516157**	**95**	**71**	**67**
PONTIAC	BONNEVILLE	40818	81	26	21
PLYMOUTH	VOLARE	22171	53	64	34
OLDSMOBILE	DELTA 88	68576	87	50	44
OLDSMOBILE	98	35215	86	62	53
BUICK	LESABRE	38864	61	101	62
CHEVROLET	CAPRICE	66156	93	77	72
CHEVROLET	IMPALA	41827	118	68	80
FORD	LTD	52577	110	78	86
BUICK	ELECTRA	27869	137	74	101
MERCURY	MARQUIS	27478	111	103	114
STATION WAGONS		**144548**	**86**	**126**	**108**
CHEVROLET	CAPRICE	21963	94	125	118
FORD	LTD	19656	120	148	178
SPECIALTY		**276040**	**178**	**116**	**206**
CHRYSLER	CORDOBA	28530	100	81	81
OLDSMOBILE	TORONADO	19405	167	92	154
MERCURY	COUGAR XR-7	57098	217	87	189
FORD	THUNDERBIRD	98243	207	101	209
BUICK	RIVIERA	21695	149	147	219
CADILLAC	ELDORADO	24113	126	233	294
CADILLAC	SEVILLE	18109	163	224	365

(See page 19 for notes.)

TABLE 4

LOSS PAYMENT SUMMARY BY MAKE AND SERIES
1979 MODELS - NON-CRASH FIRE RESULTS

PART G: FULL-SIZE CARS (WHEELBASE > 120 INCHES)

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
ALL	FULL-SIZE	158121	159	137	218
SPECIALTY		158121	159	137	218
CADILLAC	DE VILLE 4D	35638	91	91	83
CADILLAC	DE VILLE 2D	55290	136	106	144
LINCOLN	CONTINENTAL 4D	22576	213	187	398
LINCOLN	MARK V	25409	247	173	427

NOTES:

SERIES ARE RANKED WITHIN GROUP AND SUBGROUP BY ASCENDING AVERAGE LOSS PAYMENTS PER INSURED VEHICLE YEAR. SERIES WITH LESS THAN 20,000 INSURED VEHICLE YEARS OF EXPOSURE AND FEWER THAN 20 CLAIMS ARE NOT SUMMARIZED.

TABLE 5
PERCENTAGE OF NON-CRASH FIRE CLAIMS EXCEEDING GIVEN DOLLAR AMOUNTS BY CAR SIZE AND BODY STYLE 1979 MODELS

Car Size and Body Style	Percentage of Claims Exceeding					Sample Size
	$500	$1,000	$2,000	$4,000	$6,000	
Small Subcompact	52%	40%	34%	23%	7%	697
Two-door models	49	38	32	19	3	490
Station Wagons	53	47	47	24	2	45
Sports	64	49	42	35	20	142
Subcompact	52	42	33	24	8	868
Two-door models	55	45	36	27	8	559
Four-door models	34	25	19	11	0	204
Station Wagons	55	47	37	24	5	38
Sports	75	66	54	40	36	67
Small Compact	55	40	32	21	2	209
Two-door models	54	40	33	21	2	112
Four-door models	61	41	30	22	3	64
Station Wagons	45	39	30	18	3	33
Compact	39	32	27	22	11	1194
Two-door models	35	29	23	17	8	487
Four-door models	31	26	20	14	3	119
Station Wagons	43	35	32	25	6	63
Specialty	45	37	32	28	16	525
Intermediate	40	31	25	20	10	1433
Two-door models	34	28	22	17	8	297
Four-door models	33	26	21	16	7	503
Station Wagons	50	42	40	32	14	129
Specialty	47	34	27	23	14	504
Full-Size	45	36	28	23	20	256
Specialty	45	36	28	23	20	256

Car Size Definition:

Small Subcompact -Cars with wheelbases less than or equal to 96 inches
Subcompact -Cars with wheelbases greater than 96 inches and less than or equal to 101 inches
Small Compact -Cars with wheelbases greater than 101 inches and less than or equal to 106 inches
Compact -Cars with wheelbases greater than 106 inches and less than or equal to 111 inches
Intermediate -Cars with wheelbases greater than 111 inches and less than or equal to 120 inches
Full-size -Cars with wheelbases greater than 120 inches

TABLE 6

PERCENTAGE OF NON-CRASH FIRE CLAIMS EXCEEDING GIVEN DOLLAR AMOUNTS 1979 MODEL YEAR CARS WITH THE LOWEST FIRE LOSSES

Make and Series	Percentage of Claims Exceeding					Sample Size
	$500	$1,000	$2,000	$4,000	$6,000	
Pontiac Bonneville 4 Dr.	14%	14%	8%	5%	5%	34
Toyota Corolla*	58	35	29	23	0	31
Chevrolet Malibu 4 Dr.	22	22	19	9	3	32
Honda Accord 2 Dr.	31	22	19	16	3	32
Oldsmobile Delta 88 2 Dr.	18	16	11	5	5	38
Chevrolet Malibu 2 Dr.	27	17	15	10	0	48

*Body style cannot be determined from Vehicle Identification Number.

TABLE 7

PERCENTAGE OF NON-CRASH FIRE CLAIMS EXCEEDING GIVEN DOLLAR AMOUNTS 1979 MODEL YEAR CARS WITH THE HIGHEST FIRE LOSSES

Make and Series	Percentage of Claims Exceeding					Sample Size
	$500	$1,000	$2,000	$4,000	$6,000	
MG MGB	70%	53%	42%	33%	11%	63
Chevrolet Corvette	78	68	57	43	38	60
Lincoln Mark V	47	39	36	27	27	64
Lincoln Continental 4 Dr.	63	45	37	37	29	49
Cadillac Seville	60	37	23	20	20	30
Cadillac Eldorado	58	42	32	32	32	31
Pontiac Firebird	51	46	42	34	24	127
Buick Riviera	44	38	32	29	24	33
Ford Thunderbird	47	33	27	24	14	207

Definitions

Average Loss Payment per Claim - The total of all loss payments made for the claims for a group of vehicles, divided by the number of claims paid; expressed as dollars per claim.

Average Loss Payment per Insured Vehicle Year - For a group of vehicles, the product of Claim Frequency and Average Loss Payment per Claim, divided by 10,000; expressed as dollars per insured vehicle year. It should be noted that this definition differs from the commonly used insurance term, pure premium, but yields similar results.

Car Size Class - A grouping of cars based on wheelbase. There are six vehicle size classes defined as follows:

Small Subcompact - cars with wheelbases less than or equal to 96 inches.
Subcompact - cars with wheelbases greater than 96 inches and less than or equal to 101 inches.
Small Compact - cars with wheelbases greater than 101 inches and less than or equal to 106 inches.
Compact - cars with wheelbases greater than 106 inches and less than or equal to 111 inches.
Intermediate - cars with wheelbases greater than 111 inches and less than or equal to 120 inches.
Full-Size - cars with wheelbases greater than 120 inches.

Each car size group is further divided into four subgroups - regular two-door models, regular four-door models, station wagons, and sports or specialty models. In the compact, intermediate, and full-size groups, the specialty models are those that have either only two-door models or are luxury cars. The sports subgroup in the two subcompact size classes are sports models which are basically two-seater cars.

Claim Frequency - The number of claims for a group of vehicles, divided by the exposure for that group; expressed as claims per ten thousand insured vehicle years.

Deductible Amount - That portion of the loss paid by the policyholder.

Exposure - The time interval an individual vehicle is insured. Exposure for a group of vehicles is expressed in units of insured vehicle years.

Loss Payment - That portion of the loss paid by the insurer; in general, the loss minus any deductible amount.

Non-Crash Fire Loss - Any fire loss sustained by a vehicle that is not the result of collision. This includes both arson and accidental fire damage to a vehicle.

Vehicle Identification Number (VIN) - A code, variously comprising both numbers and letters; normally, 8 to 17 characters in length, assigned to each vehicle by its manufacturer. The VIN uniquely identifies the vehicle within at least a ten-year time span and, in recent model year vehicles, contains coding which identifies the make, series, model year, and other characteristics of each vehicle.

Vehicle Series - A name denoting a family of vehicles, within a make, with the same wheelbase and a degree of commonality in construction such as body, chassis, etc.

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R73-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1973 Models*, March 1974.

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INSURANCE LOSSES, THEFT COVERAGES

THE DISTRIBUTION OF THEFT LOSS PAYMENT AMOUNTS PASSENGER CARS, VANS, PICKUPS, AND UTILITY VEHICLES

1981 Models During Their First Year
1980 Models During Their First Two Years
1979 Models During Their First Three Years

Research Report HLDI A-18
June 1982

Highway Loss Data Institute
Watergate Six Hundred
Washington, D.C. 20037

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Summary

This Highway Loss Data Institute report summarizes the distribution of payments for theft losses for 1979, 1980, and 1981 model year cars, vans, pickups, and utility vehicles.

Principal Findings

Passenger Cars

- Sports and specialty models generally had greater percentages of large theft losses than other models within the same size class.
- Subcompact sports cars, in particular, tended to have the greatest percentages of large theft losses.
- There were large differences among individual vehicles in the extent to which large loss payments contributed to their theft loss experience. For example, over twenty percent of the theft loss payments for the 1980 Chevrolet Corvette exceeded $10,000 whereas only five percent of the payments for the 1980 Chevrolet Caprice two-door exceeded $2,000.

Vans, Pickups, and Utility Vehicles

- Intermediate-sized utility vehicles had greater percentages of large theft loss payments than other vehicles.
- There were large differences among individual vehicles in the distribution of the size of theft loss payment amounts. For example, 36 percent of the theft loss payments for the 1980 Ford Bronco exceeded $6,000, compared to 13 percent for the 1980 Jeep CJ-5.

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Introduction

The Highway Loss Data Institute (HLDI) is a non-profit, public service organization that gathers, processes, and publishes insurance data concerning human and economic losses resulting from owning and operating private passenger motor vehicles, and, in particular, how these losses vary among different kinds of vehicles.

This report shows the distribution of theft loss payment amounts for 1979, 1980, and 1981 model year private passenger cars, vans, pickups, and utility vehicles. Ten insurers supplied the comprehensive insurance coverage and theft loss data used in this study: Aetna, Allstate, GEICO, Kemper, Liberty Mutual, Nationwide, Prudential, State Farm, Travelers, and USAA.

The theft loss results presented in this report include the complete spectrum of theft losses occurring under comprehensive coverages, ranging from the theft of items from the vehicle to the theft of the vehicle itself. However, certain electronic items, such as tape decks and non-factory installed citizens'-band radios, are *not* generally covered by comprehensive insurance and thefts of these items are not included in the results.

It is intended that the dissemination of this and other HLDI reports will contribute to research into ways for reducing crash damage, crash injuries, and theft losses, as well as providing the public with information illustrating the differences in the insurance loss experience of different kinds of vehicles.

Results and Discussion

This report summarizes the distributions of theft loss payment amounts for 1979, 1980, and 1981 model year private passenger vehicles insured under comprehensive coverages. The results are presented in two sections. The first section shows the percentage of theft loss payment amounts exceeding various dollar amounts for passenger cars; the second section presents results for vans, pickups, and utility vehicles. The loss payment amount distributions presented in this report are based on more than 175,000 paid claims for 1979 models, over 62,000 paid claims for 1980 models, and nearly 13,000 paid claims for 1981 models. Generally, the greater the number of theft loss payments associated with a result, the more confidence can be placed in it.

Theft Loss Payment Distributions for Passenger Cars

Table 1 shows the percentage of theft loss payment amounts exceeding various dollar amounts by body style and car size class for 1981 models. Results are presented only for those body style and car size groups that had more than 100 paid theft claims. In most cases, greater percentages of the theft loss payments for sports and specialty models were for larger amounts than other body styles within the same size class.

Table 2 shows the percentage of theft loss payment amounts exceeding various dollar amounts by body style and car size class for 1980 models. Sports and specialty models again tended to have the largest percentages of payments exceeding each dollar amount. Subcompact sports cars had, by far, the largest theft loss amounts.

Station wagons, in general, and small compact station wagons, in particular, tended to have the smallest percentages of payments in excess of each loss payment amount.

Table 3 illustrates similar results for 1979 models. Within a given size class, sports and specialty models again had the largest percentages of theft payments in excess of each dollar amount. Subcompact sports models had particularly high percentages of large loss payment amounts.

Table 4 lists the 1979, 1980, and 1981 model year passenger cars with the worst theft loss results. These results are derived from HLDI research report T81-1. It should be noted that results for several foreign makes, such as BMW, Mercedes Benz, and Volvo, were included for 1981 models but were not in the HLDI data system for model years prior to 1981. All vehicle series with results at least three times worse than the average for *all* cars in a given model year (a relative result of 300 or more) for *any* measure of theft loss experience — relative claim frequency, relative average loss payment per claim, or relative average loss payment per insured vehicle year — are included in the table.

The percentages of theft loss payments exceeding various dollar amounts for the 1981 models with the worst theft loss results are presented in Table 5. The Chevrolet Corvette and the BMW 320i had the largest percentages of payments over $500 while the Buick Riviera and Cadillac Eldorado had the greatest percentages of payments in excess of both $6,000 and $10,000. In contrast, the four-door models of the Mercury Marquis and Ford LTD, as well as the Ford Thunderbird, a compact specialty car, had the smallest percentages of losses exceeding each dollar amount. Although each of these cars had relative claim frequency results more than three times the average for all 1981 cars, less than ten percent of their loss payments were greater than $500 and only two percent exceeded $1,000.

Table 6 presents similar results for the 1980 model year cars with the worst theft loss results. The Chevrolet Corvette had the highest percentage of payments in excess of almost every dollar amount. Nearly one-fourth of its theft payments were greater than $10,000. A large percentage of the theft loss payments for the Datsun 280ZX also exceeded $10,000. More than one-fifth of its theft payments were greater than $10,000. The Chevrolet Caprice two-door model, on the other hand, had the lowest percentage of theft payments over $500. Its relative claim frequency result (425) was more than four times the average for all 1980 cars, but less than ten percent of its theft loss payments exceeded $500.

Table 7 illustrates similar results for 1979 models. The Chevrolet Corvette, again, had the greatest percentage of payments in excess of $500, $1,000, and $10,000. The Oldsmobile Ninety-Eight four-door model had the smallest percentage of loss payments exceeding each dollar amount. Only five percent of its payments were more than $500 and only two percent were larger than $2,000.

Figure 1 presents the distribution of theft loss payments for the 1980 model year Chevrolet Caprice two-door and Chevrolet Corvette. The figure shows that large theft losses contributed much more heavily to overall theft losses for some vehicles than for others. Over twenty percent of the theft loss payments for the Chevrolet Corvette exceeded $10,000. In contrast, only a small percentage of the theft loss payments for the two-door Caprice exceeded $6,000.

(Text continues on Page 11)

TABLE 1

Comprehensive Coverages
Percentage of Theft Loss Payments Exceeding Given Dollar Amounts
By Body Style and Car Size Group — 1981 Models

Body Style and Car Size Group	Percentage of Loss Payments Exceeding					Number of Theft Loss Payments
	$500	$1,000	$2,000	$6,000	$10,000	
Two-Door Models						
Small Subcompact	33	16	10	6	0	1205
Subcompact	21	13	10	7	1	1100
Small Compact	13	9	8	5	1	288
Compact	42	34	27	20	5	883
Intermediate	20	16	12	9	4	477
Four-Door Models						
Small Subcompact	32	14	9	6	0	482
Subcompact	28	12	8	4	0	459
Small Compact	17	10	7	6	1	426
Compact	27	20	15	12	1	389
Intermediate	17	13	12	9	4	1139
Station Wagons						
Small Subcompact	30	18	14	11	0	126
Subcompact	15	7	5	2	0	129
Intermediate	11	7	5	2	1	175
Sports/Specialty						
Small Subcompact	61	47	28	21	16	165
Subcompact	80	44	18	15	13	621
Small Compact	56	22	9	5	4	211
Compact	25	17	13	10	3	2258
Intermediate	40	30	23	16	13	650
Full-Size	47	32	24	18	15	318

TABLE 2

Comprehensive Coverages
Percentage of Theft Loss Payments Exceeding Given Dollar Amounts
By Body Style and Car Size Group — 1980 Models

Body Style and Car Size Group	Percentage of Loss Payments Exceeding					Number of Theft Loss Payments
	$500	$1,000	$2,000	$6,000	$10,000	
Two-Door Models						
Small Subcompact	29	14	9	4	0	7803
Subcompact	21	13	10	5	0	7053
Small Compact	13	10	8	5	0	1782
Compact	31	25	21	14	0	5581
Intermediate	16	13	11	7	1	2640
Four-Door Models						
Small Subcompact	26	8	4	3	0	385
Subcompact	21	16	13	3	0	868
Small Compact	13	10	8	5	0	1594
Compact	19	15	13	8	0	2535
Intermediate	15	12	9	6	1	4758
Station Wagons						
Small Subcompact	22	12	9	1	0	442
Subcompact	22	6	3	3	1	164
Small Compact	8	6	4	1	0	281
Compact	17	12	8	5	0	469
Intermediate	14	11	8	5	0	710
Sports/Specialty						
Small Subcompact	47	32	21	15	10	1107
Subcompact	84	45	29	25	23	1179
Small Compact	49	17	8	5	3	582
Compact	21	14	11	8	0	11047
Intermediate	28	22	18	13	9	3257
Full-Size	45	35	24	17	14	1324

TABLE 3

Comprehensive Coverages
Percentage of Loss Payments Exceeding Given Dollar Amounts
By Body Style and Car Size Group — 1979 Models

Body Style and Car Size Group	Percentage of Loss Payments Exceeding					Number of Theft Loss Payments
	$500	$1,000	$2,000	$6,000	$10,000	
Two-Door Models						
Small Subcompact	28	14	9	2	0	10119
Subcompact	20	14	10	2	0	11098
Small Compact	9	7	5	0	0	2988
Compact	21	16	13	6	0	17978
Intermediate	9	7	6	3	0	14920
Four-Door Models						
Small Subcompact	24	12	9	5	0	290
Subcompact	21	15	12	1	0	1703
Small Compact	13	9	7	0	0	850
Compact	13	9	8	1	0	4001
Intermediate	8	6	5	2	0	23016
Station Wagons						
Small Subcompact	18	12	10	1	0	767
Subcompact	22	13	10	2	0	346
Small Compact	13	9	7	1	0	684
Compact	18	12	8	2	0	1493
Intermediate	8	6	5	2	0	4407
Sports/Specialty						
Small Subcompact	37	23	16	11	4	2673
Subcompact	74	41	26	22	19	2020
Small Compact	35	14	9	6	1	1014
Compact	28	18	14	8	0	22557
Intermediate	17	13	10	6	2	17960
Full-Size	29	21	15	11	6	7461

TABLE 4

Comprehensive Coverages
1979, 1980, and 1981 Model Year Passenger Cars
With The Worst Theft Loss Results

Make and Series	Relative Claim Frequency	Relative Average Loss Payment Per Claim	Relative Average Loss Payment Per Insured Vehicle Year
1981 Models			
Chevrolet Corvette	**696**	249	**1712**
BMW 320i	**895**	133	**1112**
Cadillac Eldorado	229	294	**673**
Cadillac DeVille 2 Dr.	242	234	**564**
Pontiac Firebird	282	189	**533**
Buick Riviera	186	266	**495**
Mercury Marquis 4 Dr.	**391**	29	115
Ford LTD 4 Dr.	**392**	28	109
Ford Thunderbird	**590**	19	109
1980 Models			
Chevrolet Corvette	**470**	**370**	**1741**
Porsche 924 Coupe	**460**	239	**1102**
Lincoln Mark VI 4 Dr.	255	231	**589**
Cadillac Eldorado	238	243	**578**
Cadillac Brougham 4 Dr.	179	**322**	**575**
Lincoln Mark VI 2 Dr.	**300**	166	**497**
Cadillac Seville	173	283	**490**
Cadillac DeVille 2 Dr.	191	253	**483**
Buick Riviera	179	245	**438**
Pontiac Firebird	236	181	**427**
Datsun 280ZX	112	**303**	**341**
Oldsmobile Ninety-Eight 2 Dr.	275	120	**330**
Oldsmobile Toronado	159	200	**319**
Volkswagen Scirocco	**313**	87	273
Pontiac Bonneville 2 Dr.	**303**	68	207
Volkswagen Rabbit Convertible	**318**	63	199
Chevrolet Caprice 2 Dr.	**425**	40	168
Audi 4000*	**315**	51	160
1979 Models			
Chevrolet Corvette	235	**379**	**892**
Lincoln Continental 2 Dr.	253	232	**588**
Cadillac Eldorado	197	254	**501**
Lincoln Mark V	181	240	**434**
Porsche 924 Coupe	**316**	138	**434**
Lincoln Versailles	**384**	106	**408**
Buick Riviera	**520**	77	**400**
Pontiac Firebird	161	208	**335**
Oldsmobile Toronado	**375**	86	**324**
Cadillac Fleetwood Brougham	108	278	**301**
Oldsmobile Ninety-Eight 2 Dr.	**407**	62	253
Datsun 280ZX 2+2	61	**399**	243
Oldsmobile Ninety-Eight 4 Dr.	**325**	61	197
Pontiac Bonneville 2 Dr.	**302**	53	161
Chevrolet Caprice 2 Dr.	**314**	48	149

(See bottom of next page for footnote.)

TABLE 5

Comprehensive Coverages
Percentage of Theft Loss Payments Exceeding Given Dollar Amounts
1981 Model Year Passenger Cars With The Worst Theft Loss Results

Make and Series	Percentage of Loss Payments Exceeding					Number of Theft Loss Payments
	$500	$1,000	$2,000	$6,000	$10,000	
Chevrolet Corvette	81	42	21	18	16	387
BMW 320i	80	46	9	7	7	206
Pontiac Firebird	57	38	28	21	10	249
Buick Riviera	54	47	39	25	19	124
Cadillac Eldorado	53	43	31	22	20	159
Cadillac DeVille 2 Dr.	46	31	20	16	13	150
Mercury Marquis 4 Dr.	6	2	2	1	1	173
Ford LTD 4 Dr.	5	1	1	1	1	293
Ford Thunderbird	1	1	1	1	0	572

TABLE 6

Comprehensive Coverages
Percentage of Theft Loss Payments Exceeding Given Dollar Amounts
1980 Model Year Passenger Cars With The Worst Theft Loss Results

Make and Series	Percentage of Loss Payments Exceeding					Number of Theft Loss Payments
	$500	$1,000	$2,000	$6,000	$10,000	
Chevrolet Corvette	87	46	30	25	24	1102
Porsche 924 Coupe	62	31	16	11	9	129
Datsun 280ZX	54	44	33	23	21	264
Volkswagen Scirocco	53	19	7	4	1	563
Volkswagen Rabbit Convertible	53	19	3	0	0	151
Cadillac Brougham 4 Dr.	49	42	31	22	18	228
Pontiac Firebird	49	32	22	17	3	1351
Cadillac DeVille 2 Dr.	46	36	26	17	15	706
Buick Riviera	42	34	30	20	14	471
Cadillac Eldorado	39	31	21	15	13	652
Audi 4000*	39	5	2	1	0	544
Cadillac Seville	33	25	21	18	17	285
Oldsmobile Toronado	31	27	23	16	13	369
Lincoln Mark VI 4 Dr.	29	19	18	13	10	171
Lincoln Mark VI 2 Dr.	22	15	13	12	10	272
Oldsmobile Ninety-Eight 2 Dr.	22	18	15	11	6	189
Pontiac Bonneville 2 Dr.	14	11	9	6	0	582
Chevrolet Caprice 2 Dr.	7	6	5	2	0	561

Footnote for Tables 4 & 6:

*Vehicle Series denoted by an asterisk are those whose precise body styles are not determinable from their Vehicle Identification Numbers.

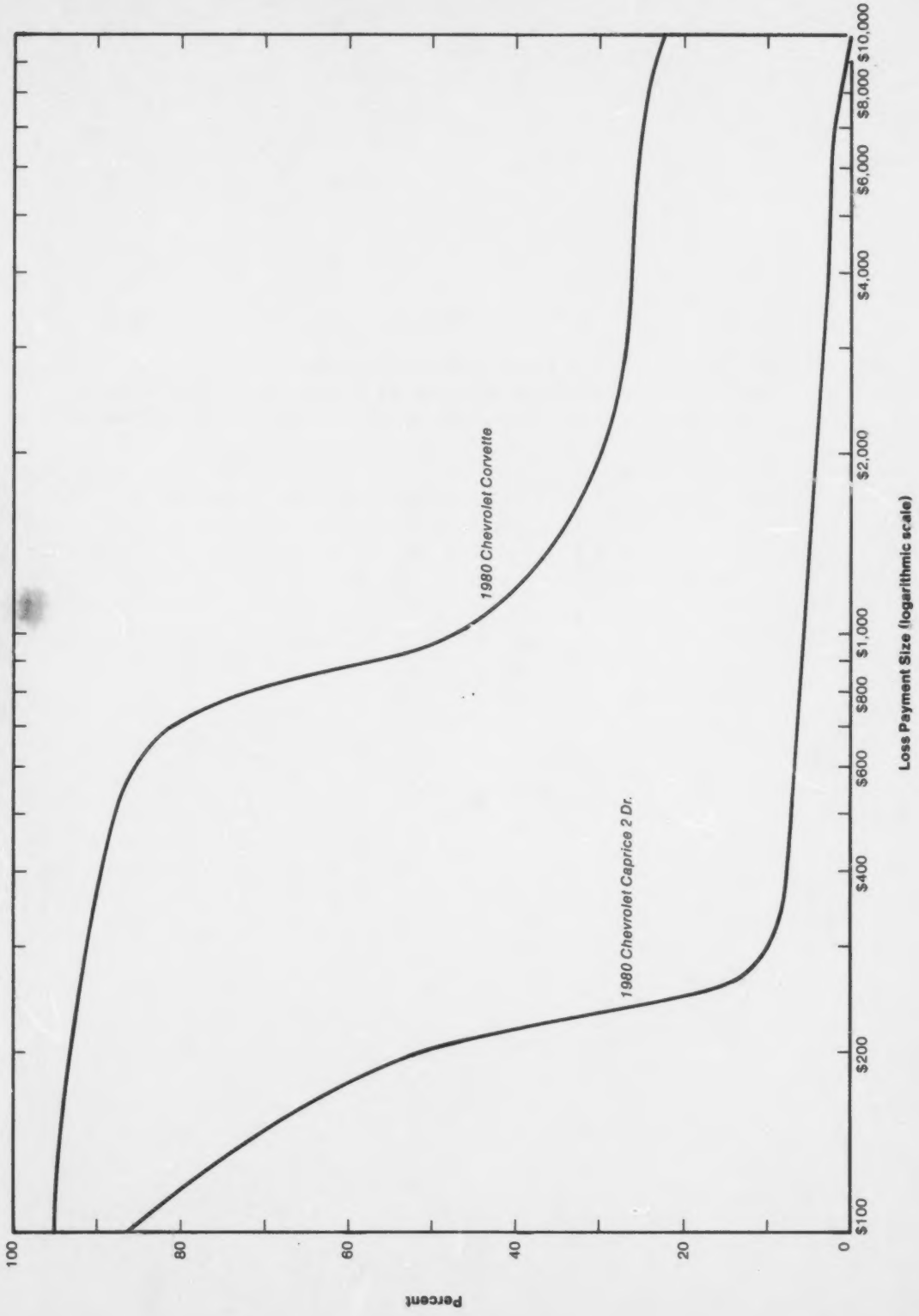
TABLE 7

Comprehensive Coverages
Percentage of Theft Loss Payments Exceeding Given Dollar Amounts
1979 Model Year Passenger Cars With The Worst Theft Loss Results

Make and Series	Percentage of Loss Payments Exceeding					Number of Theft Loss Payments
	$500	$1,000	$2,000	$6,000	$10,000	
Chevrolet Corvette	76	41	26	21	19	1849
Pontiac Firebird	51	31	21	16	0	4418
Datsun 280ZX 2+2	46	38	33	26	18	146
Cadillac Fleetwood Brougham	42	37	22	15	11	485
Porsche 924 Coupe	38	12	7	5	4	379
Cadillac Eldorado	36	25	18	14	12	1564
Lincoln Continental 2 Dr.	23	18	17	15	8	473
Lincoln Mark V	23	19	17	13	11	1518
Lincoln Versailles	12	9	7	5	2	971
Buick Riviera	11	6	5	3	1	3512
Oldsmobile Toronado	10	8	7	5	1	2290
Oldsmobile Ninety-Eight 2 Dr.	7	5	5	3	0	1694
Chevrolet Caprice 2 Dr.	6	5	4	2	0	2458
Pontiac Bonneville 2 Dr.	6	5	5	3	0	2321
Oldsmobile Ninety-Eight 4 Dr.	5	3	2	1	0	3490

FIGURE 1

Comprehensive Coverages
Percentage of Theft Loss Payments Exceeding Given Dollar Amounts — 1980 Models



Theft Loss Payment Distributions for Vans, Pickups, and Utility Vehicles

This section summarizes the distributions of theft loss payments for 1979, 1980, and 1981 model year vans, pickups, and utility vehicles. Results for pickups are divided into two groups. Small pickups are defined as having a curb weight of less than 3,000 pounds while standard pickups have a curb weight of 3,000 pounds or more. Utility vehicles are divided into separate groups based on wheelbase. Small utility vehicles are defined as those with wheelbases of less than 100 inches, intermediate utility vehicles as those with wheelbases in the range of 100 to 120 inches, and large utility vehicles as those with wheelbases exceeding 120 inches. Results are presented only for those vehicle groups which had more than 100 paid theft claims.

Table 8 shows the percentages of theft loss payments exceeding various dollar amounts for 1981 models. Small pickups had the largest percentage of payments in excess of both $500 and $1,000. Vans, however, had the greatest percentage of payments over $10,000.

Table 9 presents similar results for 1980 models. Intermediate utility vehicles had a substantially larger percentage of theft loss payments over each dollar amount than the other vehicle groups.

The percentages of theft loss payments exceeding given dollar amounts for 1979 models are shown in Table 10. Intermediate utility vehicles, again, had the greatest percentage of payments in excess of each dollar amount. Large utility vehicles, on the other hand, had the smallest percentage of payments over $500, $1,000, $2,000 and $6,000.

Table 11 shows the 1979, 1980, and 1981 model year vans, pickups, and utility vehicles with the worst theft loss experience. Any vehicle series with a result at least three times worse than the average (a relative result of 300 or more) for *all* passenger cars in a model year for *any* measure of theft loss experience - relative claim frequency, relative average loss payment per claim, relative average loss payment per insured vehicle year - is included in the table.

Table 12 presents the percentage of theft loss payments exceeding various dollar amounts for the 1979, 1980, and 1981 model year vans, pickups, and utility vehicles with the worst theft loss results. These results are derived from HLDI research report T81-1. The table shows that the 1979 and 1980 models of the Ford Bronco, an intermediate utility vehicle, consistently had the greatest percentages of payments in excess of nearly every dollar amount. The Jeep CJ-7 and CJ-5, in contrast, tended to have the smallest percentages of losses over each dollar amount.

The results for individual vans, pickups, and utility vehicles indicate that large loss payments contributed more heavily to overall theft losses for some vehicles than for others. For example, over 35 percent of the payments for the 1980 Ford Bronco were greater than $6,000 compared to only 13 percent for the Jeep CJ-5.

TABLE 8

Comprehensive Coverages
Percentage of Theft Loss Payments Exceeding Given Dollar Amounts
Vans, Pickups, and Utility Vehicles — 1981 Models

Vehicle Type	Percentage of Loss Payments Exceeding					Number of Theft Loss Payments
	$500	$1,000	$2,000	$6,000	$10,000	
Vans	29	19	15	12	6	236
Small Pickups	39	24	17	10	2	186
Standard Pickups	26	20	18	15	4	798
Small Utility Vehicles	26	18	16	13	4	189

TABLE 9

Comprehensive Coverages
Percentage of Theft Loss Payments Exceeding Given Dollar Amounts
Vans, Pickups, and Utility Vehicles — 1980 Models

Vehicle Type	Percentage of Loss Payments Exceeding					Number of Theft Loss Payments
	$500	$1,000	$2,000	$6,000	$10,000	
Vans	34	20	15	10	4	837
Small Pickups	34	24	19	12	0	1461
Standard Pickups	30	24	21	16	1	3192
Small Utility Vehicles	28	19	16	14	1	1007
Intermediate Utility Vehicles	44	34	31	27	10	487

TABLE 10

Comprehensive Coverages
Percentage of Theft Loss Payments Exceeding Given Dollar Amounts
Vans, Pickups, and Utility Vehicles — 1979 Models

Vehicle Type	Percentage of Loss Payments Exceeding					Number of Theft Loss Payments
	$500	$1,000	$2,000	$6,000	$10,000	
Vans	39	26	20	12	3	5522
Small Pickups	36	26	21	9	0	2161
Standard Pickups	42	36	32	19	1	13737
Small Utility Vehicles	28	22	19	12	0	2096
Intermediate Utility Vehicles	49	40	36	29	4	3347
Large Utility Vehicles	21	16	14	11	3	304

TABLE 11

Comprehensive Coverages
1979, 1980, and 1981 Vans, Pickups, and Utility Vehicles
With The Worst Theft Loss Results

Make and Series	Relative Claim Frequency	Relative Average Loss Payment Per Claim	Relative Average Loss Payment Per Insured Vehicle Year
1981 Models			
Jeep CJ-7	300	95	284
1980 Models			
Ford Bronco	102	356	362
Chevrolet G20 Chevyvan	149	224	335
Jeep CJ-7	241	134	323
Jeep CJ-5	276	111	308
1979 Models			
Ford Bronco	134	443	592
Ford F-250 Pickup	99	398	394
Ford F-150 Pickup	105	336	352
Ford E-250 Econoline Van	125	279	350
Dodge AD100/AW100 Ramcharger	99	348	343
Ford E-150 Econoline Van	123	265	325
Chevrolet C10/K10 Blazer	96	309	297
GMC C1500/K1500 Jimmy	79	311	246

TABLE 12

Comprehensive Coverages
Percentage of Theft Loss Payments Exceeding Given Dollar Amounts
1979, 1980, and 1981 Model Year Vans, Pickups, and Utility Vehicles
With The Worst Theft Loss Results

Make and Series	Percentage of Loss Payments Exceeding					Number of Theft Loss Payments
	$500	$1,000	$2,000	$6,000	$10,000	
1981 Models						
Jeep CJ-7	27	18	15	11	6	110
1980 Models						
Ford Bronco	48	40	40	36	13	187
Chevrolet G20 Chevyvan	47	33	24	19	13	111
Jeep CJ-7	30	20	17	15	1	534
Jeep CJ-5	26	17	15	13	1	467
1979 Models						
Ford Bronco	61	51	45	36	6	1319
Ford F-250 Pickup	55	48	43	32	3	1279
Ford F-150 Pickup	51	46	40	25	1	3879
Dodge AD100/AW100 Ramcharger	49	39	36	26	5	223
Ford E-250 Econoline Van	47	35	28	18	7	221
Ford E-150 Econoline Van	47	34	28	16	5	1247
GMC C1500/K1500 Jimmy	42	35	30	27	6	141
Chevrolet C10/K10 Blazer	42	34	31	27	4	962

Definitions

Average Loss Payment per Claim — The total of all loss payments made for the claims for a group of vehicles, divided by the number of claims paid; expressed as dollars per claim.

Average Loss Payment per Insured Vehicle Year — For a group of vehicles, the product of Claim Frequency and Average Loss Payment per Claim, divided by 1,000; expressed as dollars per insured vehicle year. *It should be noted that this definition differs from the commonly used insurance term, pure premium, but yields similar results.*

Claim Frequency — The number of claims for a group of vehicles, divided by the exposure for that group; expressed as claims per one thousand insured vehicle years.

Deductible Amount — That portion of the theft loss borne by the policyholder.

Exposure — The time interval an individual vehicle is insured. Exposure for a group of vehicles is expressed in units of insured vehicle years.

Loss Payment — That portion of the theft loss borne by the insurer; in general, the total theft loss minus the deductible amount.

Operator Age Group — The factor which distinguishes those vehicles whose rated driver is youthful from those vehicles whose rated driver is not youthful (see *Youthful Operator*).

Rated Driver — The driver who, for insurance purposes, is considered to represent the greatest loss potential for the insured vehicle.

Theft Coverages — The coverage under which people insure their own car against loss caused by partial or total theft.

Vehicle Classifications — There are four vehicle classes, defined as follows:

1. ***Passenger Cars*** — There are four major body style groupings of passenger cars — regular two-door models, regular four-door models, station wagons, and sports or specialty models. Each body style group is further divided into size class subgroups as follows:

   Small Subcompact — Cars with wheelbases less than or equal to 96 inches.

   Subcompact — Cars with wheelbases greater than 96 inches and less than or equal to 101 inches.

   Small Compact — Cars with wheelbases greater than 101 inches and less than or equal to 106 inches.

   Compact — Cars with wheelbases greater than 106 inches and less than or equal to 111 inches.

   Intermediate — Cars with wheelbases greater than 111 inches and less than or equal to 120 inches.

   Full-Size — Cars with wheelbases greater than 120 inches.

2. ***Vans*** — Fully enclosed vehicles with either no hood or a very short hood, in which the engine is placed at least 50 percent behind the windshield. The driver's position is usually well forward, nearly beside the engine, usually within the forward 25% of the wheelbase. These vehicles are designed for cargo transport and are equipped with a right side cargo access door and rear doors. The cargo area is not separated from the passenger area — both are enclosed under the same roof. Some passenger vans are equipped with additional seats in the cargo area and usually have additional side windows also.

3. ***Pickups*** — Cargo-carrying vehicles, usually on a truck chassis, with an enclosed cab and a separate open cargo area. The open cargo area generally is a box with raised sides with an opening tailgate. There are also a small number of auto pickups which are similar to regular pickups except that they are built on a passenger car chassis. Pickups are further divided into two subgroups based on curb weight — small pickups (less than 3,000 pounds) and standard pickups (3,000 pounds or more).

4. ***Utility Vehicles*** — Vehicles built on a heavy-duty chassis capable of off-road use. They are of conventional construction with the driver behind the engine. The cargo and passenger areas are integral with the driver area. Many of these vehicles are equipped with soft or removable tops. Frequently, these vehicles are equipped with four-wheel drive. Utility vehicles are further divided into three subgroups based on wheelbase — small utility vehicles (less than 100 inches), intermediate utility vehicles (from 100 to 120 inches), and large utility vehicles (greater than 120 inches).

Vehicle Identification Number (VIN) — A code, variously comprising both numbers and letters; normally 8 to 17 characters in length, assigned to each vehicle by its manufacturer. The VIN uniquely identifies the vehicle within at least a ten-year time span and, in recent model year vehicles, almost always contains coding which identifies the make, series, model year, and other characteristics of each vehicle.

Vehicle Series — A name denoting a family of vehicles, within a make, with the same wheelbase and a degree of commonality in construction such as body, chassis, etc.

Youthful Operator — For the purposes of this report, all males (married or single) under 25 years of age and all unmarried females under 25 years of age.

List of Publications

Research reports published by the Highway Loss Data Institute are:

R72-1 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1972 Models,* June 1973.

R73-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1973 Models Compared with 1972 Models,* September 1973.

R73-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1973 Models,* March 1974.

R73-3 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1973 Models During Their First Two years,* December 1974.

R73-4 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1973 Models During Their First Three Years,* December 1975.

R74-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1974 Models,* May 1974.

R74-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1974 Models During Their First Year,* December 1974.

R74-3 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1974 Models During Their First Two Years,* December 1975.

R75-1 *Automobile Insurance Losses, Collision Coverages, Initial Results for 1975 Models,* July 1975.

R75-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1975 Models During Their First Year,* December 1975.

R76-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1976 Models,* June 1976.

R76-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1976 Models During Their First Year, 1975 Models During Their First Two Years, 1974 Models During Their First Three Years,* December 1976.

R77-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1977 Models,* June 1977.

R77-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1977 Models During Their First Year, 1976 Models During Their First Two Years, 1975 Models During Their First Three Years,* December 1977.

R78-1 *Automobile Insurance Losses, Collision Coverages; initial Results for 1978 Models,* June 1978.

R78-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1978 Models During Their First Year, 1977 Models During Their First Two Years, 1976 Models During Their First Three Years,* January 1979.

R79-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1979 Models,* June 1979.

R79-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1979 Models During Their First Year, 1978 Models During Their First Two Years, 1977 Models During Their First Three Years,* December 1979.

R80-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1980 Models,* June 1980.

R80-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1980 Models During Their First Year, 1979 Models During Their First Two Years, 1978 Models During Their First Three Years,* December 1980.

R81-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1981 Models,* July 1981.

R81-2 *Insurance Losses, Collision Coverages; Passenger Cars, Vans, Pickups, and Utility Vehicles; 1981 Models During Their First Year, 1980 Models During Their First Two Years, 1979 Models During Their First Three Years,* December 1981.

V78-1 *Automobile Insurance Losses, Non-Commercial Collision Coverages; Variations by Make and Series, Vans, Pickups and Utility Vehicles; 1978 Models During Their First Year, 1977 Models During Their First Two Years,* February 1979.

V79-1 *Automobile Insurance Losses, Non-Commercial Collisions Coverages; Variations by Make and Series, Vans, Pickups and Utility Vehicles; 1979 Models During Their First Year, 1978 Models During Their First Two years,* April 1980.

V79-2 *Automobile Insurance Losses, Personal Injury Protection Coverages; Claim Frequency Results by Size of Claim for 1977, 1978, and 1979 Vans, Pickup Trucks, and Utility Vehicles,* October 1980.

V79-3 *Insurance Theft Losses; Vans, Pickups, and Utility Vehicles, 1979 Models,* May 1981.

V80-1 *Automobile Insurance Losses, Non-Commercial Collision Coverages; Variations by Make and Series, Vans, Pickups, and Utility Vehicles; 1980 Models During Their First Year, 1979 Models During Their First Two Years, 1978 Models During Their First Three Years,* December 1980.

V80-2 *Automobile Insurance Losses, Personal Injury Protection Coverages; Injury Claim Frequency Results by Size of Claim; Vans, Pickup Trucks, and Utility Vehicles, 1977-1980 Models,* September 1981.

I75-1 *Automobile Insurance Losses, Injury Coverages; Claim Frequency Results for 1974 and 1975 Models,* June 1976.

I75-2 *Automobile Insurance Losses, Percentage of Collision Claims with Associated Injury Claims for 1974 and 1975 Models,* March 1977.

I76-1 *Automobile Insurance Losses, Injury Coverages; Claim Frequency Results for 1974, 1975, and 1976 Models,* November 1977.

I76-2 *Automobile Insurance Losses, Injury Coverages; Claim Frequency Results for 1974, 1975, and 1976 Models,* September 1978.

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A-1 *Automobile Insurance Losses, Collision Coverages; A Comparison of Results for 1972 and 1973 Models,* May 1974.

A-2 *Automobile Insurance Losses, Collision Coverages; Relationships Between Losses and Vehicle Density, 1972 and 1973 Models,* September 1974.

A-3 *Automobile Insurance Losses, Collision Coverages; A Comparison of Results for 1973, 1974 and 1975 Models,* July 1975.

A-4 *Automobile Insurance Losses, Collision Coverages; Relationships Between Losses and Vehicle Density, 1974 and 1975 Models,* December 1975.

A-5 *Automobile Insurance Losses, Collision Coverages; Relationships Between Losses and Vehicle Body Style, 1974 and 1975 Models,* December 1975.

A-6 *Automobile Insurance Losses, Collision Coverages; An Investigation of Relationships Between Losses and Engine Specifications, Using 1973 Models,* June 1976.

A-7 *Automobile Insurance Losses, Collision Coverages; Annual Increases and Seasonal Variations 1972, 1973, 1974 and 1975 Models,* June 1976.

A-8 *Automobile Insurance Losses, Injury Coverages; A Preliminary Comparison of Results for Volkswagen Rabbits with Passive and Active Seat Belts, 1975 and 1976 Models,* June 1977.

A-9 *Automobile Insurance Losses, Collision Coverages; A Comparison of Collision Claim Size Distributions for 1974, 1975, and 1976 Models,* November 1977.

A-10 *Automobile Insurance Losses, Injury Coverages; Comparisons of Claim Frequencies of Volkswagen Rabbits with Automatic and Manual Seat Belts, 1975, 1976, and 1977 Models,* June 1979.

A-11 *Automobile Insurance Losses, Collision Coverages; The Consistency of the Loss Experience of Specific Vehicles Produced in Several Years, 1975 to 1978 Models,* June 1979.

A-12 *Automobile Insurance Losses, Collision Coverages; An Assessment of the Effects of the Federal Safety Bumper Standard on the Losses for 1972 Through 1978 Models,* June 1980.

A-13 *Automobile Insurance Losses, Personal Injury Protection and Collision Coverages; The Effects of Car Size on Crash Losses, 1977-1980 Models,* May 1981.

A-14 *Automobile Insurance Losses, Personal Injury Protection and Collision Coverages; Comparisons of the Loss Experience of Two- and Four-Door Cars, 1978, 1979, and 1980 Models,* June 1981.

A-15 *Automobile Insurance Losses, Personal Injury Protection and Collision Coverages; Relationships Between Injury and Collision Losses and Engine Options for Selected 1977-1979 Compact Cars,* June 1981.

A-16 *Automobile Insurance Losses, Collision Coverages; The Frequency of Claims Involving Salvage; Subcompact and Compact Cars; 1980 Models,* January 1982.

A-17 *Insurance Losses, Comprehensive Coverages; Non-Crash Fire Losses; 1979-1980 Models,* February 1982.

A-18 *Insurance Losses, Theft Coverages; The Distribution of Theft Loss Payment Amounts; Passenger Cars, Vans, Pickups, and Utility Vehicles; 1981 Models During Their First Year, 1980 Models During Their First Two Years; 1979 Models During Their First Three Years,* June 1982.

T79-1 *Automobile Insurance Theft Losses by Make and Series; 1979 Models,* June 1980.

T80-1 *Automobile Insurance Theft Losses by Make and Series; 1979 and 1980 Models,* April 1981.

T81-1 *Insurance Losses, Theft Coverages; Passenger Cars, Vans, Pickups, and Utility Vehicles; 1981 Models During Their First Year, 1980 Models During Their First Two Years, 1979 Models During Their First Three Years,* May 1982.